

Sub 1

Kindly substitute the following for pending claim 10:

10. (Amended) A conductivity sensor as recited in claim 4 wherein said control circuit is an operational amplifier-based.

Sub 1

Kindly substitute the following for pending claim 11:

11. (Amended) A conductivity sensor comprising:
a first annular electrode having a first inner diameter and a first outer diameter, said first annular electrode having a first threaded portion said first outer diameter;
a second annular electrode having a second inner diameter and a second outer diameter, said second annular electrode having a second threaded portion said second outer diameter; and
a tubular portion disposed axially between said first electrode and said second electrode, said tubular portion having a third inner diameter greater than said first inner diameter and said second inner diameter,
said tubular portion, said first electrode, and said second electrode defining a sensor cell having said third inner diameter, said cell having a cell length between said first electrode and said second electrode.

Sub 1

Kindly substitute the following for pending claim 16:

16. (Amended) A method of assembling a conductivity sensor comprising:
coupling a first annular electrode having a first inner diameter to a tubular portion;
coupling a second annular electrode having the first inner diameter to the tubular portion so that the tubular portion is positioned axially between said first electrode and said second electrode,
defining a sensor cell having a second inner diameter that is greater than said first inner diameter with said first annular electrode, said second annular electrode, and said tubular portion.